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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,311	11/26/2001	William A. White III	SAA-61	9418

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SQUARE D COMPANY
LEGAL DEPARTMENT IP SECTION
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EXAMINER

BENGZON, GREG C

ART UNIT PAPER NUMBER

2144

DATE MAILED: 12/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/004,311	WHITE ET AL.	
	Examiner	Art Unit	
	Greg Bengzon	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 13-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

This application has been examined. Claims 1-9 and 13-24 are pending. Claims 10-12 are cancelled.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/11/2005 has been entered.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

The effective date of the subject matter in the claims of this application is November 26, 2001.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 cites a limitation reciting 'broadcasting a request by the client node for assignment of a network identifier from the server'. The Examiner notes that the claim language may lead to misinterpretation, as it is not clear whether the client node is broadcasting or the server node is broadcasting said request.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 17-21, 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Krivoshein et al. (US Patent 5980078) hereinafter referred to as Krivoshein.

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Krivoshein disclosed (re. Claim 17) providing a network adapter serially connected to a plurality of client nodes (Krivoshein – Column 16 Lines 60-65) ; initializing each of the plurality of client nodes with a default identifier (Krivoshein – Column 23 Lines 60-65) ; and, assigning each of the plurality of client nodes a unique network identifier by the network adapter (Krivoshein – Column 23 Lines 40-45); (re. Claim 18) wherein the step of assigning each of the plurality of client nodes a unique network identifier by the network adapter occurs during power-up of the communication network system (Krivoshein – Column 23 Lines 40-45); (re. Claim 19) wherein the step of assigning each of the plurality of client nodes a unique network identifier by the network adapter occurs during a hot-swap of one of the plurality of client nodes of the communication network system (Krivoshein – Column 23 Lines 40-45); (re. Claim 20) wherein the step of assigning each of the plurality of client nodes a unique network identifier by the network adapter is initiated by the network adapter (Krivoshein – Column 23 Lines 40-45); (re. Claim 21) broadcasting a request for a network identifier by one of the plurality of client nodes (Krivoshein – Column 23 Lines 40-45) ; (re. Claim 23) wherein the network adapter is a server node (Krivoshein – Column 16 Lines 50-55); (re. Claim 24) wherein the network adapter is a field bus connector (Krivoshein – Column 16 Lines 50-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Krivoshein et al. (US Patent 5980078) hereinafter referred to as Krivoshein, in view of Lorenz et al. (US Patent 6700877) hereinafter referred to as Lorenz.

Krivoshein disclosed a method of assigning a network identifier to a client node, the client node having a memory and being operably connected to a server wherein the server assigns the network identifier to the client node, the method comprising the steps of: (re. Claim 1,4) providing a default identifier, the default identifier being assigned to the client node (Krivoshein – Column 24 Lines 5-10); (re. Claim 1, 4) broadcasting a request by the client node for assignment of a network identifier from the server (Krivoshein – Column 23 Lines 40-45).

However Krivoshein did not disclose (re. Claim 1,4,22) determining a location of the client node, the location being identified with respect to the server; and, (re. Claim 1,4,22) assigning the network identifier to the client node by the server to the client node in response to the determined location of the client node.

Lorenz disclosed (re. Claim 1,4,22) determining a location of the client node, the location being identified with respect to the server (Lorenz – Column 1 Lines 30-35); and, (re. Claim 1,4,22) assigning the network identifier to the client node by the server to the client node in response to the determined location of the client node (Lorenz – Column 3 Lines 60-65, Column 10 Lines 45-50). Lorenz disclosed (re. Claim 2) transmitting a toggle signal from the server, the toggle signal having an amount of state transitions (Lorenz – Column 5 Lines 55-60); storing the amount of state transitions in the memory of the client node; and, identifying the client node having the default identifier and the amount of state transitions (Lorenz – Column 6 Lines 10-20). Lorenz disclosed (re. Claim 3) wherein identifying the client node having the default identifier and the amount of state transitions comprises the steps of: transmitting a request by the server to receive the amount of state transitions stored in the memory of the client node (Lorenz – Column 6 Lines 30-40); and, comparing the amount of state transitions stored in the memory of the client node with the toggle signal wherein the network identifier is transmitted to the client node in response to the comparison (Lorenz – Column 6 Lines 45-50).

Krivoshein and Lorenz are analogous art because they present concepts and practices regarding automatic address allocation for devices connected to a bus system. At the time of the invention it would have been obvious to combine the teachings of Lorenz into the method and system of Krivoshein. The motivation for said combination would have been, as Lorenz suggests (Lorenz – Column 2 Lines 5-15),

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overcome problems in address assignment that are encountered when defective communications subscribers are exchanged.

Krivoshein disclosed (re. Claim 5) inserting an additional client node into the network (Krivoshein – Column 23 Lines 40-45); and, identifying the additional client node for assigning the permanent network identifier (Krivoshein – Column 23 Lines 40-45); (re. Claim 6) monitoring a level of network interaction of each client node (Krivoshein – Column 10 Lines 45-50); selecting a client node having a lowest level of network interaction (Krivoshein – Column 13 Lines 40-45).

Claims 7-9 are rejected on the same basis as Claims 1-6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13, 15, 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Farsi et al. ('CANopen I/O Module: Simple and Efficient System Integration, IEEE 1998) hereinafter referred to as Farsi, in view of Lorenz et al. (US Patent 6700877) hereinafter referred to as Lorenz.

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Farsi disclosed (re. Claim 13) the server node having an address input and an address output ; each of the plurality of operably connected client nodes having an address input and an address output, (Farsi – Column 5 Lines 15-20, Figure 1) the address input and the address output being operably connected to a microprocessor in the network client node; a communication bus being operably connected to the server node and each of the one or more client nodes (Farsi – Column 5 Lines 15-20, Figure 1).

However Farsi did not disclose (re. Claim 13) an address bus being operably connected the server node and each of the plurality of client nodes, the address bus being connected between the output address of the server node and the input address of the nearest client node, the output address of the nearest client node being connected to the input address of the next nearest client node, wherein each subsequent operably attached client node is similarly connected to the network; and,

a network identifier being assigned to each client node of the plurality of client nodes by the server node, the network identifier of each client node being assigned a unique value in response to the location of each respective client node to the server node.

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Lorenz disclosed (re. Claim 13) an address bus being operably connected the server node and each of the plurality of client nodes, the address bus being connected between the output address of the server node and the input address of the nearest client node, the output address of the nearest client node being connected to the input address of the next nearest client node, wherein each subsequent operably attached client node is similarly connected to the network; (Lorenz – Figure 1) and,

a network identifier being assigned to each client node of the plurality of client nodes by the server node, the network identifier of each client node being assigned a unique value in response to the location of each respective client node to the server node. (Lorenz – Column 3 Lines 60-65, Column 10 Lines 45-50)

Farsi and Lorenz are analogous art because they present concepts and practices regarding automatic address allocation for devices connected to a bus system. At the time of the invention it would have been obvious to combine the teachings of Lorenz into the method and system of Farsi. The motivation for said combination would have been, as Lorenz suggests (Lorenz – Column 2 Lines 5-15), overcome problems in address assignment that are encountered when defective communications subscribers are exchanged.

Farsi disclosed (re. Claim 15) wherein the communication bus is CANOpen (Farsi – Column 6 Lines 35-40); (re. Claim 16) wherein the client node is an output module (Farsi – Column 5 Lines 60-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Farsi et al. ('CANopen I/O Module: Simple and Efficient System Integration, IEEE 1998) hereinafter referred to as Farsi, in view of Lorenz et al. (US Patent 6700877) hereinafter referred to as Lorenz, in view of Krivoshein et al. (US Patent 5980078) hereinafter referred to as Krivoshein.

The combination of Farsi and Lorenz did not disclose (re. Claim 14) wherein at least one of the client nodes is a placeholder node for reserving a network identifier for the position occupied by the placeholder node.

Krivoshein disclosed (re. Claim 14) wherein at least one of the client nodes is a placeholder node for reserving a network identifier for the position occupied by the placeholder node (Krivoshein – Column 10 Lines 10-15).

Farsi, Lorenz, and Krivoshein are analogous art because they present concepts and practices regarding automatic address allocation for devices connected to a bus

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system. At the time of the invention it would have been obvious to combine the teachings of Krivoshein into the combined method and system of Farsi and Lorenz. The motivation for said combination would have been, as Krivoshein suggests (Krivoshein – Column 5 Lines 1-5), to assist programming of field devices from a remote location to reduce system management costs and downtime for a process control system.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Bengzon whose telephone number is (571) 272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

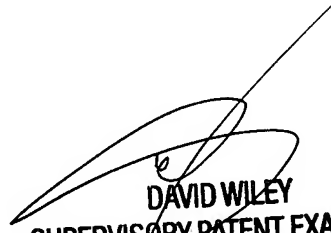
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571)272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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